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Claims

What is claimed is:

1   1.   In a computer controlled user interactive display
2   system, a display interface implementation for directing
3   a user's attention to specific selectable items on a
4   display screen with crowded selectable items comprising;
5   user controlled means for moving an on-screen
6   pointer to approach said selectable items; and
7   means for highlighting all items in any set of a
8   plurality of said items wherein each item in the set is
9   within a predetermined distance of said approaching
10   pointer.

1   2.   The computer controlled user interactive display
2   system of claim 1 wherein said selectable items are
3   icons.

1   3.   The computer controlled user interactive display
2   system of claim 2 further including means for ending said
3   highlighting of each of said highlighted icons when the
4   pointer moves outside of said predetermined distance
5   for said icon.

1   4.   The computer controlled user interactive display
2   system of claim 2 further including means for ending said
3   highlighting of each of said highlighted icons after a
4   predetermined period of time.

1   5.   The computer controlled user interactive display
2   system of claim 2 wherein said means for highlighting
3   sequentially highlight each icon in said set.

1   6.   The computer controlled user interactive display
2   system of claim 2:
3   wherein said means for sequentially highlighting
4   said set of icons highlight each icon in the set for a
5   defined period of time; and
6   further including means for enabling the user
7   selection of each sequentially highlighted item during
8   said period of time.

1   7.   The computer controlled user interactive display
2   system of claim 6 wherein the icons in said set overlap
3   each other.

1   8.   A method for directing a user's attention to specific
2   selectable items on a display screen with crowded
3   selectable items in computer controlled user interactive
4   display systems comprising:
5   moving an on-screen pointer to approach said
6   selectable items; and
7   highlighting all items in any set of a plurality of
8   said items wherein each item in the set is within a
9   predetermined distance of said approaching pointer.

1   9.   The method of claim 8 wherein said selectable items
2   are icons.

1   10.   The method of claim 9 further including the step of
2   ending said highlighting of each of said highlighted
3   icons when the pointer is moved outside of said
4   predetermined distance for said icon.

1   11.   The method of claim 9 further including the step of
2   ending said highlighting of each of said highlighted
3   icons after a predetermined period of time.

1   12.   The method of claim 9 wherein said step of
2   highlighting sequentially highlights each item in said
3   set.

1   13.   The method of claim 9 wherein said step of
2   sequentially highlighting said set of icons highlight
3   each icon in the set for a defined period of time; and
4   further including the step of enabling the user
5   selection of each sequentially highlighted item during
6   said period of time.

1   14.   The method of claim 13 wherein the icons in said set

2   overlap each other.

1   15.   A computer program having program code included on a
2   computer readable medium for directing a user's attention
3   to specific selectable items on a display screen with
4   crowded selectable items in computer controlled user
5   interactive display systems comprising:
6   user controlled means for moving an on-screen
7   pointer to approach said selectable items; and
8   means for highlighting all items in any set of a
9   plurality of said items wherein each item in the set is
10 within a predetermined distance of said approaching
11 pointer.

1   16.   The computer program of claim 15 wherein said
2   selectable items are icons.

1   17.   The computer program of claim 16 further including
2   means for ending said highlighting of each of said
3   highlighted icons when the pointer moves outside of said
4   predetermined distance for said icon.

1   18.   The computer program of claim 16 further including
2   means for ending said highlighting of each of said
3   highlighted icons after a predetermined period of time.

1   19.   The computer program of claim 16 wherein said means
2   for highlighting sequentially highlights each icon in
3   said set.

1 20. The computer program of claim 16 wherein said means
2 for sequentially highlighting said set of icons highlight
3 each icon in the set for a defined period of time; and
4   further including means enabling the user selection
5 of each sequentially highlighted item during said period
6 of time.

1 21. The computer program of claim 20 wherein the icons
2 in said set overlap each other.

1   22.   In a computer controlled user interactive display

2   system, a display interface implementation for directing

3   a user's attention to specific selectable items on a

4   display screen with crowded selectable items comprising;

5   user controlled means for moving an on-screen

6   pointer to approach a cluster of said selectable items;

7   and

8   means for sequentially highlighting each item in

9   said cluster when said approaching pointer is within a

10 predetermined distance from said cluster.

1 23. In a computer controlled user interactive display
2 system, a display interface implementation for directing
3 a user's attention to specific selectable items on a
4 display screen with crowded selectable items comprising:
5   user controlled means for moving an on-screen
6 pointer to approach a cluster of said selectable items;
7   means for determining whether the items in said
8 cluster have sufficient separation for said pointer to
9 select separate items in said cluster; and
10   means responsive to said determining means for
11 sequentially highlighting each item in said cluster when
12 there is insufficient separation.

1 24. The computer controlled user interactive display
2 system of claim 23 wherein each item is activated for
3 selection when highlighted.

1   25. A method for directing a user's attention to

2   specific selectable items on a display screen with

3   crowded selectable items in computer controlled user

4   interactive display systems comprising:

5   moving an on-screen pointer to approach a cluster of

6   said selectable items; and

7   sequentially highlighting each item in said cluster

8   when said approaching pointer is within a predetermined

9   distance from said cluster.

1   26. A method for directing a user's attention to

2   specific selectable items on a display screen with

3   crowded selectable items in computer controlled user

4   interactive display systems comprising:

5   moving an on-screen pointer to approach a cluster of

6   said selectable items;

7   determining whether the items in said cluster have

8   sufficient separation for said pointer to select separate

9   items in said cluster; and

10   sequentially highlighting each item in said cluster

11 responsive to a determination that there is insufficient

12 separation.

1   27. The method of claim 26 wherein each item is

2   activated for selection when highlighted.

1   28. A computer program having program code included on a
2   computer readable medium for directing a user's attention
3   to specific selectable items on a display screen with
4   crowded selectable items in computer controlled user
5   interactive display systems comprising:
6   user controlled means for moving an on-screen
7   pointer to approach a cluster of said selectable items;
8   and
9   means for sequentially highlighting each item in
10 said cluster when said approaching pointer is within a
11 predetermined distance from said cluster.

1   29. A computer program having program code included on a
2   computer readable medium for directing a user's attention
3   to specific selectable items on a display screen with
4   crowded selectable items in computer controlled user
5   interactive display systems comprising:
6   user controlled means for moving an on-screen
7   pointer to approach a cluster of said selectable items;
8   means for determining whether the items in said
9   cluster have sufficient separation for said pointer to
10 select separate items in said cluster; and
11   means responsive to said determining means for
12 sequentially highlighting each item in said cluster when
13 there is insufficient separation.

1   30. The computer program of claim 29 wherein each item
2   is activated for selection when highlighted.